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U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NE-CPA-38
Rev. 01/09

ANNUAL NUTRIENT BUDGET & MANAGEMENT JOB SHEET

(1) SITE (FIELD) INFORMATION & LOCATION – ATTACH MAP OF FIELD

Producer Joe Brown | **Date** 3/8/08
Field Name Uncles | **Acres** 129.8
Tract / Field # T 1234 / F 1 | **Prior Crop** Soybeans
Soil Map Unit MoC - Moody (musym = 6811) | **Planned Crop** Corn
[1]Soil Texture silty clay loam - fine | **[2]Realistic Yield (RY) Goal**
Legal Description NE1/3 , ____ , **Section** 01, **Township** 02 N, **Range** 01 ☒E or ☐W, **County:** Somewhere

[1]If Soil Texture is Coarse (Sand, Loamy Sand, Sandy Loam), then no Fall Application of Inorganic N shall occur, except when winter annual crop/cover crop such as wheat is planted.

[2]RY = (5-year Average Yield) X 105%

(2) PHOSPHORUS INDEX RISK ASSESSMENT

☐ *No or* ☒ *Yes - Manure or Organic-By Products Applied (future or within last 3 years)?*

If "YES" - Complete P-Index & Check Rating: ☒ *Low,* ☐ *Medium,* ☐ *High, or* ☐ *Very High*

(3) SOIL TEST INFORMATION – ATTACH COPY OF SOIL TEST ANALYSES

NUTRIENT BUDGET

			Nutrient						(12) Notes & Calculations
RECOMMENDATIONS (lb/Acre)			**N**	**P_2O_5**	**K_20**	**S**	**Zn**		
(4) Requirements (lb/A) – (NEEDS)			277.0	15.0	75.0	0.0			(201.6 x 1.2) 35 = 277
CREDITS (lb/Acre)									
(5) Soil Test Residual			60.8	42.0	385.0	26.0			7.6 x 8 = 60.8
(6) Soil Organic Matter Credit			65.0						2.3 x 201.6 x 0.14 = 65.0
(7) Irrigation Water Credit (Inches: 12)			12.0						12 in. x 12 ppm/12 in. = 12
(8) Legume (Type: Beans **) Credit**			45.0						See Instructions
(9) Manure / Organic Applied									
Date Applied	**Source (Type)**	**Total Rate Applied**							
fall 2007	beef solids - pen	20 T/A	90.0	462.0					See Manure Analysis
(10) TOTAL CREDITS (Add (5) thru (9))			272.8	504.0	385.0	26.0	0.0	0.0	
(11) NUTRIENT RECOMMENDATIONS = (NEEDS minus TOTAL CREDITS)			4.2	-489.0	-310.0	-26.0			

(13) RECOMMENDED / PLANNED NUTRIENT APPLICATION (CURRENT YEAR)

(Obtained from ☒Soil Test Report or ☐Crop Consultant)

Source (Type)	Formulation or Form	Timing & Method	Total (Gross) Rate Applied Per Acre	Actual (Net) Nutrients Applied (lb. / Acre)					
				N	**P_2O_5**	**K_2O**	**S**	**Zn**	
Commercial	34-0-0 dry	planting injection	15	5.1	0	0	0	0	
TOTAL NUTRIENTS PLANNED (lb/acre)				5.1	0	0	0	0	0

Nitrification-Inhibitor Planned? ☐Yes or ☒No

(14) ACTUAL NUTRIENT APPICATION (Complete After Application or End of Season)

Date (mo/yr)	Source	Formulation or Form	Total (Gross) Rate Applied Per Acre	Actual (Net) Nutrients Applied (lb. / Acre)					
				N	**P_2O_5**	**K_2O**	**S**	**Zn**	
				6.8	0	0	0	0	0
TOTAL NUTRIENTS APPLIED (lb/acre)				6.8	0	0	0	0	0

Nitrification-Inhibitor Used? ☐Yes or ☒No

(15) Actual Yield: 190 bu/A **(bu/A; T/A; etc.)**

ANNUAL NUTRIENT BUDGET & MANAGEMENT PLAN INSTRUCTIONS

Provide/Complete the following information. For additional instructions, see Practice Speciation S-590 for Nutrient Management.

1. **Site Information & Location – Attach Copy of Map (Aerial, Topography, USGS, etc.)**
   - Predominant Soil Map Unit, where Predominant is the largest % soil unit in that field.
   - Soil Texture, complete N Leaching Assessment if Soil Texture is Coarse.
   - Calculate Realistic Yield (RY) Goal, where RY = 5-year average yield x 105%
     - Example: 100 bu/ac. x 105% = 105 bu/ac = RY.

Coarse	Sand, Loamy Sand, Sandy Loam
Medium	Silt, Silt Loam, Loam
Fine	Silty Clay Loam, Silty Clay, Clay, Clay Loam, Sandy Clay Loam, Sandy Clay

2. **If Organic By-Products (manure, sludge, biosolids) are applied, determine Phosphorus-Index Risk Rating. (See S-590)**

3. **Attach Copy of Soil Test Report with Budget –** Report should not be older then 3 years.

4. **Nutrient Requirements (lb/acre)**
   - For Corn (grain): N requirement = (RY x 1.2) + 35
   - For crops other than corn, refer to Extension EC155 "Nutrient Management for Agronomic Crops in Nebraska" or NebGuides.

5. **Soil Test Residual Nitrate-N (for Corn Only) –** Use information from soil analyses
   STEP 1 – Calculate Nitrate-N Average Weighted Value (AWV) as follows (or Proceed to Step 2 if done):
   $$\frac{\{\text{Soil layer (in.) x } NO_3^- \text{ (ppm)}\} + \{\text{Soil layer (in.) x } NO_3^- \text{ (ppm)}\} + \{\text{Soil layer (in) x } NO_3^- \text{ (ppm)}\}}{\text{Total Soil Test Depth}} = \text{AWV}$$
   STEP 2:- Calculate Soil Test Residual Nitrate-N = {(Average Weighted Value for N (ppm)) x 8}

   *IF no information is reported for soil layers of 24"- 48" or 36"- 48", use 3 ppm.

6. **Determine the Soil Organic Matter (O.M.) N Credit**
   - For Corn: Soil O.M. N Credit = {O.M. % (from soils report) x RY x 0.14}
   - For Other Crops: based on University software, NebGuides or Extension Circulars.

7. **Irrigation Water N Credit (only if concentration is 10 ppm or greater) Attach copy of water analysis if applicable:**
   - Pounds of N/acre credited = {(inches pumped x ppm nitrate X 2.7) ÷ 12 inches}

8. **Legume Credit (previous years crop (as applicable):**
   - Use 45 lb. for soybeans; 150 lb. for alfalfa or 100 lb. for alfalfa on sandy soil soils (Planning Sheet 11).

9. **Manure credit within last 3 years (as applicable) – Attach Copy of Manure Analysis with Budget** (if applicable)**.**
   - Record manure type (slurry, liquid, solid) & rate (tons/acre; gallons/acre; ac-in/acre) applied from one to three years ago.
   - Credit is based on manure test, or NebGuide G1335 "Determining Crop Available Nutrients from Manure".
   - Record pounds of N, P_2O_5 and K credited from prior and current year manure applications.

10. **Total Credit (lb/acre)**
    - Total Credits = {#5 + #6 + #7 + #8 + #9}.

11. **Nutrient Recommendations (lb/acre)**
    - Nutrient Recommendation = {Total Credits (#10) minus Requirements/Needs (#4)}.

12. **Notes & Calculations -** Use this area to record calculations or references.

13. **Record Recommended / Planned Nutrient Application for Current Year -** Obtain information from soil test or from crop consultant.
    - **List the Nutrient Source (Type):** Commercial, Manure, Biosolids, Compost, etc.;
    - **List Formulation or Form of Nutrient:** 82-0-0 gas; 10-34-0 dry; Slurry-Swine; Solid-Beef; Lagoon-Dairy, Runoff-Beef, etc.;
    - **Provide Planned Timing & Method** of nutrient application (example: spring planting, fall knife, etc.);
    - **Provide Planned Total (Gross) Application Rate per Acre** (lb/ac, gallons/ac, tons/ac) *of each source*;
    - **Calculate Actual (Net) Application Rate (lb/acre)** for each nutrient *by source*;
    - **Calculate Total Nutrients (lb/acre)** to be applied;
    - **Check Yes or No** if Nitrification-Inhibitor is planned.

14. **Record Actual Nutrient Application for Current Year -** Obtain information from soil test or from crop consultant.
    - **List the Date of Application** (mo/yr);
    - **List the Nutrient Source (Type):** Commercial, Manure, Biosolids, Compost, etc.;
    - **List Formulation or Form of Nutrient**: 82-0-0 gas; 10-34-0 dry; Slurry-Swine; Solid-Beef; Lagoon-Dairy, Runoff-Beef, etc.;
    - **Provide Total (Gross) Application Rate per Acre** (lb/ac, gallons/ac, tons/ac) *of each source*;
    - **Calculate Actual (Net) Application Rate (lb/acre)** for each nutrient *by source*;
    - **Calculate Total Nutrients (lb/acre)** to be applied;
    - **Check Yes or No** if Nitrification-Inhibitor was used.

15. **Record Actual Yield (bu/acre; tons/acre).**